



## Integration of scientific and indigenous knowledge in climate resilience

*Joseph Kenson Sakala*

I grew up in a society that saw great conflict between man and nature, not to mention climate shocks that have kept on increasing over the past twenty years. My passion emerged with my interest to turn things around to protect nature in my small community. This made me pursue studies in Environmental Sciences at University of Malawi. What looked like a crazy and unrealistic dream gradually evolved into a 'dream come true' as I embarked on a journey to work towards bringing people and nature in harmony and helping vulnerable farmers from the small communities to build resilience towards climate change, which poses as the greatest challenge towards food security and their livelihood in general.

Just like any intervention, I started by bringing awareness in schools and communities on the implications of destroying nature. For example, I emphasized on the increasing soil erosion due to rapid water runoff on the land surface (in some scenarios this has the potential to cause floods), extinction of various flora and fauna, less vegetative cover, drought and change in micro-climate which eventually transcends into macroclimate of the area in general. These information-sharing sessions were conducted in schools and communities within my reach at that particular time. One might also wish to know that Malawi is among the most vulnerable countries to climate change. The country continues to face increasing extreme weather events such as droughts, floods, and reduction in the rainfall season from 7 months to 4 months now or even less in some instances.

Today most people have come to know me; Joseph Kenson Sakala, through my active involvement in environmental and climate related activities since 2010. My life was greatly transformed with my first working experience with the small communities called



Joseph during one of the information-sharing sessions

Mgona and Mutu. I began to mobilize the community and optimized our team of 'Youth for Environment and Sustainable Development' (YSD) to ensure a change in the communities' attitude and behavior towards conserving nature. We conducted a number of awareness meetings advocating for a change in perspectives towards natural resources, especially trees. The team was impressed, as people seemed to get the message. However, there was no tangible alteration in the conduct and trend in which trees were being destroyed.

It came to a point when we needed to reflect and brainstorm on the 'unsuccessful impact' or less results/outcomes of the project. This reflection on the project approach is what led to the tremendous mindset-shift towards how to approach a community for change of behavior or attitude.

The group had to make a number of resolutions; among them was the highlight on the lack of community participation and ownership of the intervention being taken. The group realized that in the development, planning and execution of the interventions, the community members were not involved. The general perception from our team was that the intellectual capability, which they had, was enough to turn things around. Nevertheless, it was learnt from the reflections that the intellect alone wasn't enough — the community members' commitment and ownership was needed to steer and sustain any project.

One would wonder how a project can be implemented in a community with community involvement. The approach the group

took was to engage with the community right from situation analysis, identifying the problem together and in the same way developing appropriate interventions that would accommodate both the intellectual and indigenous understanding and skills. For example, in our new approach both the community members and our team formed one project team that worked together to address the problem of deforestation and rainfall challenges.

Through community inclusion, the team was able to identify local crops, which could be used as drought resistant harvests, such as local cassava and locally available edible wild fruits and vegetables. My team of YSD and I helped the community understand how nature and climate is changing and how the community should prepare to be resilient in such a crisis, for example, by promoting crop diversification and irrigation farming. At the same time, the communities are taught how to conserve and sustain natural resources. Out of this experience, our community outreach program on nature and climate change has seen a significant difference and now we're even able to produce some results as compared to the past. There are communities that have demonstrated understanding and practicality of crop diversification with local drought resistant crops being fully utilized in the process. Since then, our YSD team and I have continued to work with different communities affected by climate change.

My passion is to help more people in the rural areas of Malawi, especially farmers, to build resilience towards climate change and also being able to replicate the impact to other surrounding communities. Climate change continues to pose as one of the major global challenges of our times and urgent global actions are needed to address the challenge the changing life styles — transitioning from fossil fuel energy to renewable energy and promotion of Sustainable Development Goals in general.

Nevertheless, I also believe that on a small scale in rural Malawi, communities should lead this movement to make this difference; this understanding and commitment is what will continue to keep me moving towards the direction of Nature and Climate Change Management.

In conclusion, I acknowledge and recommend that the most effective and sustainable way to conduct transformative community outreach is to have effective inclusion and participation between the project implementing institution or team and the target group of the project. As it is noted in this story that integration of scientific

or intellectual knowledge with indigenous knowledge is key towards achieving sustainable climate resilience, nature conservation and not forgetting food security.



#### ABOUT THE AUTHOR

*Joseph Kenson Sakala*, a global citizen, born in Malawi on 17<sup>th</sup> September, 1988. Married to *Rhoda* and has a daughter *Jennaya* born on 06<sup>th</sup> July 2016. Joseph is a Nature & Climate Activist with a B.Sc. in Environmental Science, a Dip. in Environmental Management, a certificate in Climate Change and Renewable Energy. During his free time, Joseph loves playing with his daughter, having fun with family and viewing nature. He is the fifth born son of the late Kenson & Dorothy Sakala.